

Table 4. Selected employment characteristics of doctoral scientists and engineers, by field of doctorate: 1999

Field of doctorate	Unemployment rate	Involuntarily out-of-field rate	Labor force participation rate
	[Percent]		
All fields.....	1.3	4.3	89.5
Sciences.....	1.3	4.5	89.2
Computer and information sciences.....	S	1.7	98.9
Mathematical sciences.....	0.7	5.0	88.9
Biological and agricultural sciences.....	1.2	3.8	88.8
Agricultural/food sciences.....	1.0	4.4	86.5
Biological sciences.....	1.2	3.7	89.2
Environmental life sciences.....	S	2.7	88.7
Health sciences.....	1.3	2.8	91.5
Physical and related sciences.....	1.7	6.3	87.4
Chemistry except biochemistry.....	2.1	4.1	85.4
Earth/atmos/ocean sciences.....	2.2	5.8	88.8
Physics and astronomy.....	1.0	9.7	90.0
Social sciences.....	1.1	5.1	88.4
Economics.....	1.1	2.4	88.0
Political and related sciences.....	1.1	5.8	87.6
Sociology.....	1.2	4.9	87.3
Other social sciences.....	1.2	7.3	89.9
Psychology.....	1.2	3.5	91.6
Engineering.....	1.5	3.5	90.8
Aerospace/aeronautical engineering.....	S	2.3	93.5
Chemical engineering.....	3.1	3.3	87.3
Civil engineering.....	1.0	2.3	93.3
Electrical/computer engineering.....	1.3	2.5	92.3
Materials/metallurgical engineering.....	1.8	5.9	90.7
Mechanical engineering.....	0.7	3.9	91.6
Other engineering.....	1.7	3.9	89.4

KEY: S=Suppressed due to too few cases (fewer than 50 weighted cases).

NOTES: Labor force is defined as those employed (E) plus those unemployed and seeking work (U). Population (P) is defined as all S&E doctorate holders under age 76, residing in U.S. during the week of April 15, 1999, who earned their doctorate from U.S. institutions. The labor force participation rate (R_{LF}) is the ratio of the labor force to the population: $R_{LF} = (E+U)/P$. The unemployment rate (R_U) is the ratio of those who are unemployed but seeking employment (U) to the total labor force (E+U): $R_U = U/(E+U)$. Involuntary-out-of field rate is the percent of employed individuals who reported they were working part-time exclusively because suitable full-time work was not available and/or working in an area not related to the first doctoral degree (in their principal job) at least partially because suitable work in the field was not available.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients